STATE OF MONTANA
DEPARTMENT OF REVENUE
JOB PROFILE

Working Title
Senior Software Quality Assurance Analyst

Job Code Title
Computer Systems Analyst

Pay Band
07

Job Code Number
151517

Information Technology and Processing Division
Information and Technology Services Bureau
Applications Services Unit

Fair Labor Standards Act
Non-Exempt

The Montana Department of Revenue administers more than 30 state taxes and fees; establishes values for taxable property, including agricultural land, residential real estate, commercial real estate, forest land, business equipment, railroads and public utilities; supervises the operation of the state liquor stores and agencies and administers the laws governing the sale, taxation, and licensing of alcoholic beverages; and returns unclaimed property to its rightful owners.

The Information Technology and Processing Division serves as the operational foundation for the department's business units. Through secure, up-to-date computing and processing environments the division's Information and Technology Services Bureau (IT) and Processing and Retention Operations Bureau (PRO) contribute to the department's overall efficiency in document and payment processing while ensuring confidentiality, integrity, and availability of taxpayer data, whether in paper or electronic form. In providing these services, the division enables the department to meet its business objectives and facilitates its mission to serve the citizens of Montana. The division also includes the Administrative Team. The Information and Technology Services Bureau provides application development and support services for all revenue information systems including network services to approximately 650 users from a central office in Helena and to 60 locations in the state's 56 counties. Depending on need, services are provided either with a site visit or using remote-access technologies. The IT Bureau includes the Network Services Unit and the Applications Services Unit.

Job Responsibilities

The Senior Software Quality Assurance Analyst works with IT staff and customers to evaluate or diagnose software problems and provides technical support during software installation or configuration; develops and executes software test plans in order to identify software problems and their causes; and provides end user support for department applications. Duties include coordinating updates and production of applications; establishing documentation, testing, and migration procedures; and ensuring department software and hardware systems changes meet specified business needs and requirements. The analyst develops statewide quality assurance programs to ensure consistency and adherence to established standards and procedures as well as organizational goals and objectives. This position reports to the Applications Services (ASU) Unit Manager and may coordinate the work of other software quality assurance analysts.

- **Managing Testing Projects 40%**
  1. Designs test plans, scenarios, scripts, or procedures. Develops testing programs that address areas such as database impacts, software scenarios, regression testing, negative testing, error or bug retests, or usability.

2. Manages the quality assurance reporting process by documenting, logging, reviewing, researching, and ensuring proper testing has been completed to ensure repeatable results and compliance with standards.
3. Manages test plans, test scenarios, project reports, and business requirements on testing progress for day-to-day assignments, special projects, system upgrades, and roll outs. Reviews and maintains testing and quality control documentation.
4. Communicates system changes, fixes, upgrades, and enhancements as a liaison between system users, testers, IT staff, and consultants.
5. Assists users, testers, business analysts, and management analysts in developing and implementing test plans and requirements.
6. Provides technical and professional support for training department staff with regard to testing. Researches, designs, and develops training curriculum and provides training to staff on an ongoing basis. Mentors team members, users, and contractors on supported applications.
7. Assists in system changes by testing upgrades of hardware, software, and system programming changes. Identifies programming problems and causes and advises developers.
8. Develops and maintains department master test plans and quality control plans. Analyzes and monitors the quality assurance, testing, and quality control costs. Establishes and maintains department testing and quality control methodologies, creates or maintains databases of known test defects, monitors problem resolution efforts, and tracks successes.
9. Plan test schedules or strategies in accordance with project scope or delivery dates. Tests system modifications to prepare for implementation.
10. Conducts historical analyses of test results to identify program deviance from standards and suggests modifications to ensure compliance.
11. Provides instruction in testing for validity of results, accuracy, reliability, and conformance to department standards. Identifies differences between department standards and user applications and suggests modifications to conform to standards.

- **Quality Assurance Program Development 40%**
    1. Conducts and comprehensive evaluations in reviewing the implementation or application of systems and technologies to resolve problems or assist in the development of new processes.
    2. Advises management and other system specialists on a range of quality assurance, quality control, and testing issues.
    3. Leads projects and project teams to define and document testing needs, overall system integrity, and business requirements. As a team lead this position will set overall direction, plan and assign work, organize and direct staff, monitor resources and costs, and define and document quality assurance processes.
    4. Represents IT quality assurance and the department in technical discussions and decision meetings.
    5. Ensures project activities comply with the department's vision and policies. Takes appropriate actions to resolve compliance issues. Responds to problems with internal/external stakeholders.
    6. Works with various divisions and units to identify system needs and meet business requirements through adequate testing. Assists in preparing written system specifications.
    7. Determines performance metric, assesses results to measure achievement of organizational goals and objectives, and reports results to project and department managers.
    8. Identifies, communicates, and implements ideas for continuous improvement of the IT quality assurance processes. Provides ongoing change management functions for all application and infrastructure changes.
    9. Participates in product design reviews to provide input on functional requirements, product designs, schedules, or potential problems. May evaluate proposed software or software enhancement for feasibility.
    10. Reviews software documentation to ensure technical accuracy, compliance, and completeness or to mitigate risks.

11. May develop utility programs to test, track, and verify defects in software program. May write programs to create new procedures or modify existing procedures.

- **User Support 15%**
    1. Investigates customer problems referred by technical support and manages the unit's email boxes to assure timely and appropriate response to problems.
    2. Prepares, reviews, researches, accepts, rates, and coordinates testing of service requests (SRs) for system defects and enhancements and communicates resolutions to user community
    3. Verifies through quality control procedures that business requirements are met, converted data is not corrupt, user inputs of online data are not creating problems, and batch processes run with minimal problems.
    4. Sets up tests at the request of users to locate and correct program operating errors following installation of program.
    5. Reviews computer operating log to identify program processing errors.
    6. Identifies, analyzes, and documents problems with program function, output, online screen, or content and determines if reported issue is a programmatic or training. May train software program users.

- **Other Duties 5%**
    1. Performs other duties as assigned by the supervisor.
    2. Provides quality assurance and assists technical and business teams on special projects.
    3. Remains current in technology advancements.

Job Requirements

To perform successfully as a senior software quality assurance analyst, the incumbent must be self-motivated; possess a strong work ethic; maintain a positive attitude; and enjoy working with, and for, the public. The work requires skill in reading, interpreting, and using technical manuals, instructions, and data reports; isolating and resolving technical problems; operating various office software applications (word processing, spreadsheet, presentation, database applications, and platforms); using all department systems; establishing project goals, timelines, and standards; mentoring team members and delegating work; and translating technical information to varied audiences in order to make presentations and provide information to all levels of users and developers. Skills in multi-tasking; paying attention to details and accuracy; organizing multiple tasks within short and inflexible timelines; effectively interpreting policies and procedures in a wide variety of project areas; using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems; mathematics; providing timely and effective written, verbal, and interpersonal communication; customer service; conflict resolution; and following written and oral directions are also required. This position works with highly confidential financial and tax information and is required to maintain the highest level of confidentiality regarding all information acquired or used in performing this job.

This position requires knowledge of the theory and functions of computer systems and technologies; computer applications quality control; the business processes, values, objectives, and political structure of the department; federal and state statutes, administrative rules, and state policies and procedures; and project management.

- The minimum level of education and job-related work experience needed as a new employee **on the first day** of work is a bachelor's degree in computer science or closely related field and five years of job-related work experience.
    – Work experience must include IT support functions, using defect tracking software, software projects, testing, and automated test scripting. ISTQB Software Tester Certification, Level I, or similar certification is required.
    – ISTQB Software Tester Certification, Level II, or similar certification is preferred.
    – Other combinations of education and experience will be evaluated on an individual basis.

Department Core Values

- Respect: As a representative of the people of Montana, proceeds with the highest level of respect for the dignity of every person contacted through work. Without exception, all people are treated as equally as possible. The employee is a faithful steward of the resources provided to this agency by the citizens of Montana.
- Integrity: Conducts work honestly and makes decisions that establish a clear record that the department serves the public with integrity. Apologizes for mistakes and gives credit to others for their cooperation, work, and ideas in achieving positive results. Accountable for their actions and holds others accountable for theirs. Decisions and judgments achieve equity and justice for all parties involved including citizens and co-workers.
- Productivity: Consistently strives to minimize the waste of the department's financial, facilities, and human resources. Diligently works to improve the productivity and effectiveness of the work unit. Welcomes and encourages new ideas on improving the results of the department from the public, other officials, colleagues, and supervisors. Approaches work in a manner that builds goodwill, trust, and cooperation internally with other staff and externally with the public.
- Teamwork: Maximizes cooperation and teamwork when working with other employees, divisions, and other state agencies. Willing to work with others for the opportunity to learn from their ideas, talents, and knowledge. Seeks to resolve conflicts with other employees and work units in an open and respectful manner that reinforces teamwork. Celebrates the successes of others.

Working Conditions

Must work under time constraints, be able to maintain numerous projects at one time, and determine priorities on a daily basis. At times, the incumbent will deal with angry or difficult individuals to resolve concerns or to bring about compliance with regulations. This may cause stressful work conditions and a high degree of mental stress. As a Department of Revenue employee, the incumbent may come into contact with highly confidential financial and tax information and is required to maintain the highest level of confidentiality regarding all information acquired or used in performing this job. This position requires considerable computer and keyboard use and being seated for extended periods of time. Work hours may exceed 40 hours per week from time to time. Lifting is infrequent, less than 15 pounds and includes carrying light items such as papers and books. This job requires regular attendance as scheduled by the supervisor. This job cannot be performed at an alternate work site.

Special requirements

- Background Examination: Applicants for this position will be subject to a criminal background review before being considered for employment. Individual circumstances involving a criminal conviction will be reviewed to determine an applicant's eligibility for employment.
- Compliance with All Appropriate Montana Tax Laws: An employee's tax status must be current.

This job profile was produced by the Office of Human Resources in conjunction with the appropriate managers.

Division Administrator Review: The statements in this job profile are accurate and complete.
   Signature: Margaret Kauska, Division Administrator   Date: August 2010

Human Resource Director Review: The Office of Human Resources has reviewed this job profile.
   Signature: JeanAnn Scheuer, Human Resources Director Date: August 2010

Employee: My signature below indicates I have read this job profile and discussed it with my supervisor.

Signature: _____   Date: _____

Name (print): _____